

CLAIMS

1. A hermetic compressor comprising:
a casing (20) to which an intake pipe (28) and a discharge pipe (29) are provided; and
a compression mechanism (21) accommodated within the casing (20) for sucking from
5 the intake pipe (28) and compressing a refrigerant,
in which a high pressure chamber (23) into which the refrigerant discharged from the
compression mechanism (21) flows and which communicates with the discharge pipe (29)
is formed within the casing (20), and in which lubricant oil retained at a bottom of the high
pressure chamber (23) is supplied to the compression chamber (21),
10 the hermetic compressor, comprising:
a container member (31) which communicates with a bottom part of the high pressure
chamber (23) so as to allow the lubricant oil to flow to and from the container member
(31); and
pressure reduction means (50) which sucks a gas refrigerant in the container member
15 (31) and sending out the thus sucked gas refrigerant to the intake pipe (28) for reducing an
inside pressure of the container member (31).

2. The hermetic compressor of Claim 1, wherein the pressure reduction means (50) sucks
the gas refrigerant in the container member (31) intermittently.
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3. The hermetic compressor of Claim 2, wherein the pressure reduction means (50)
includes a gas container (35) and a switching mechanism (51) which switches connection
between a condition that the gas container (35) communicates only with the intake pipe
(28) and a condition that the gas container (35) communicates only with the container
25 member (31), and
an operation for communicating the gas container (35) with the intake pipe (28) for
pressure reduction and an operation for communicating the gas container (35) with the

container member (31) are repeated alternately.

4. The hermetic compressor of Claim 3, wherein the pressure reduction means (50) includes a communication pipe (34) connected to an upper end of the container member (31) and the intake pipe (28) and having the gas container (35) in the communication pipe (34), and

the switching mechanism (51) is composed of opening/closing valves (36, 37) arranged respectively on sides of the gas container (35) in the communication pipe (34).

5. The hermetic compressor of Claim 1, wherein the pressure reduction means (50) includes a communication pipe (34) connected to an upper end of the container member (31) and the intake pipe (28) and an adjuster valve (40) arranged in the communication pipe (34) and capable of changing a degree of opening thereof.

6. The hermetic compressor of Claim 1, further comprising an oil supply pump (30) which sucks the lubricant oil retained at the bottom of the high pressure chamber (23) and supplies it to the compression mechanism (21),

wherein the container member (31) communicates with the high pressure chamber (23) at a part lower than a level at which the oil supply pump (30) sucks the lubricant oil.

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7. The hermetic compressor of Claim 1, wherein an electric heater (53) is provided for heating liquid in the container member (31).

8. A hermetic compressor comprising:

- 25 a casing (20) to which an intake pipe (28) and a discharge pipe (29) are provided; and a compression mechanism (21) accommodated within the casing (20) for sucking from the intake pipe (28) and compressing a refrigerant,

in which a high pressure chamber (23), into which the refrigerant discharged from the compression mechanism (21) flows and which communicates with the discharge pipe (29) is formed within the casing (20), and in which lubricant oil retained at a bottom of the high pressure chamber (23) is supplied to the compression chamber (23),

5 the hermetic compressor, comprising:

a pressure reduction means (50) which sucks a gas refrigerant in the high pressure chamber (23) and sends it to the intake pipe (28) for temporally reducing an inside pressure of the high pressure chamber (23).

10 9. The hermetic compressor of Claim 8, wherein the pressure reduction means (50) includes a gas container (35) and a switching mechanism (53) which switches connection between a condition that the gas container (35) communicates only with the intake pipe (28) and a condition that the gas container (35) communicates only with the high pressure chamber (23), and

15 an operation for communicating the gas container (35) with the intake pipe (28) for pressure reduction and an operation for communicating the gas container (35) with the high pressure chamber (23) are repeated alternately to suck the gas refrigerant in the high pressure chamber (23) intermittently.

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